IN THE ABSTRACT:

As a last page of the Specification, please add the attached **ABSTRACT OF THE DISCLOSURE**.

IN THE CLAIMS:

Cancel Claims 1-53.

Please add the following claims:

76. A method for producing an information carrier comprising at least two solid material interfaces at which information is or may be applied and whereat the information is stored by local modulation of at least one solid material characteristic, from which characteristic reflection of electromagnetic radiation depends at said interface, further comprising at least one intermediate layer between said two solid material interfaces, said layer transmitting said radiation, said information being readable from at least one of said solid material interfaces by means of radiation of predetermined wavelength, comprising the step of depositing in said intermediate layer at least one layer at least predominantly consisting of at least one of Si_xC_y and of Si_vN_w by means of a reactive vacuum coating process, comprising the step of freeing Si from a solid body into a process atmosphere with a reactive gas containing at least one of C and N.

77. A method for producing an information carrier comprising at least two solid material interfaces at which information is or may be applied and whereat the information is stored by local modulation of at least one solid material characteristic, from which characteristic reflection of electromagnetic radiation depends at said interface, further comprising at least one intermediate layer between said two solid material interfaces, said layer transmitting said radiation, said information being readable from a least one of said solid material interfaces by means of radiation of predetermined wavelength, comprising the step of depositing in said intermediate layer at least one layer at least predominantly consisting of at least one of $Si_xC_yH_z$ and $Si_vN_wH_u$ by means of a reactive vacuum coating process in a process atmosphere, an optimum of transmission of said layer and of a refractive index of the material of said layer being achieved by adjusting the concentration of a gas in the process atmosphere, which gas comprises at least two of C, N and H.

Claim 54, line 1, change "53" to --77--;

Claim 55, line 1, change "one of the claims 52 to 54" to --claim 76 or 77--;

Claim 56, line 1, change "one of the claims 52 to 54" to --claim 76 or 77--;

Claim 59, line 1, change "one of the claims 55 to 57" to --claim 76 or 77--;

Claim 61, line 1, change "one of the claims 52 to 57" to --claim 76 or 77--;

Claim 62, line 1, change "one of the claims 52 to 54" to --claim 76 or 77--;

Claim 65, line 1, change "one of the claims 52 to 54" to --claim 76 or 77--;

Claim 66, line 1, change "one of the claims 52 to 54" to --claim 76 or 77--;

Cancel Claim 67 and substitute therefore the following claim:

78. An apparatus for producing an information carrier comprising at least two solid material interfaces at which information is or may be applied and whereat the information is stored by local modulation of at least one solid material characteristic, from which characteristic reflection of electromagnetic radiation depends at said interface, further comprising at least one intermediate layer between said two solid material interfaces, said layer transmitting said radiation, said information being readable from a least one of said solid material interfaces by means of radiation of predetermined wavelength, said intermediate layer comprising a layer at least predominantly of one of Si_xC_y, $Si_xC_yH_z$, Si_vN_w, $Si_vN_wH_u$, comprising a vacuum recipient with a workpiece carrier electrode therein and a solid body material source, which frees silicon into said vacuum recipient, and

further comprising a gas inlet which is connected to a gas reservoir with a gas containing at least one of C and N.

Claim 68, line 1, change "67" to --78--;

Claim 69, line 1, change "one of the claims 67 or 68" to --claim 78--;

Claim 71, line 1, change "one of the claims 67 or 68" to --claim 78--;

Claim 72, line 1, change "one of the claims 67 or 68" to --claim 78--;

Claim 73, line 1, change "one of the claims 67 or 68" to --claim 78--;

Cancel Claims 74 and 75, and add the following claims:

79. An apparatus according to claim 78, including a target which consists of a negatively or positively doped silicon.

80. An apparatus according to claim 79, wherein the target is doped with at least one of Boron and Phosphor.

Add the following claims:

81. A method according to claim 76 or 77, wherein the method includes applying a silver layer between one of the solid material interfaces and the intermediate layer.

82. A method according to claim 76 or 77, including depositing the intermediate layer to have a layer system with an optical thickness which, at least in a first approximation, is $m.\lambda_o/4$, wherein m is an integer of at least unity and is uneven and wherein λ_o designates the wavelength of said radiation which is transmitted through said at least one layer and wherein, depending from said m being an integer, m may be reduced by an amount of up to 0.6 or increased by an amount of up to 0.2.

83. A method according to claim 82, including depositing the intermediate layer so that the electromagnetic radiation for either applying or reading information has a wavelength within the band of

$$400nm \leq \lambda_s \leq 800nm.$$

84. A method according to claim 82, wherein at least one of the solid material interfaces is made to have a reflection of from about 20% to about 40% for a selected wavelength of said radiation.

85. A method according to claim 82, wherein said intermediate layer is deposited to have an index of refraction of greater than or equal to 2.59 and less than or equal to 4.6 and an extinction coefficient of less than or equal to 3.0.

86. A method according to claim 82, wherein x is greater than or equal to y.

87. A method according to claim 82, wherein v is greater than or equal to w.

88. A method according to claim 82, wherein x is less than or equal to 0.8, y is greater than or equal to 0.05 and z is greater than or equal to 0.1.

89. A method for producing an information carrier comprising at least two solid material interfaces at which information is or may be applied and whereat the information is stored by local modulation of at least one solid material characteristic, from which characteristic reflection of electromagnetic radiation depends at said interface, further comprising at least one intermediate layer between said two solid material interfaces, said layer transmitting said radiation, said information being readable from a least one of said solid material interfaces by means of radiation of predetermined wavelength, comprising the step of depositing a silver layer between one of the solid material interfaces and the intermediate layer.

90. An information carrier, comprising at least two solid material interfaces at which information is or may be applied and

whereat the information is stored by local modulation of at least one solid material characteristic, from which characteristic reflection of electromagnetic radiation depends at said interfaces, further comprising at least one intermediate layer between said two solid material interfaces, which layer transmitting said radiation, said information being readable from at least one of said solid material interfaces by means of radiation of predetermined wavelength, wherein said intermediate layer comprises a dielectric layer system with at least one layer and a further layer comprising a silver layer between one of the solid material interfaces and the intermediate layer.

REMARKS:

Claims 54-66, 68-73 and 76-90 are in the case and presented for consideration.

The priority document Swiss 2495/95 was filed in the parent application, serial no. 08/593,664 on January 29, 1996.

Accordingly, the application and claims are believed to be in condition for allowance, and favorable action is respectfully requested.

If any issues remain which may be resolved by telephonic communication, the Examiner is respectfully invited to contact